

Listing of the Claims:

The following listing of the claims replaces all prior versions and listings of the claims in the application:

1. (Currently Amended) A therapeutic bioconjugate comprising:

(a)[[.]] a hydrophilic polymer; and

(b)[[.]] one or more peptides ~~capable of binding specifically to a ligand expressed on a cell surface~~ selected from the group consisting of SEQ ID NOs 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100, 102, 104, 106, 108, 110, 114, 120, 122, 124, 128, 130, 132, 134, 136, 138, 140, 142, 144, 146, 148, 150, 152, 154, 156, 158, 160, 162, 164, 166, 168, 170, 172, 174, 176, 178, 180, 182, 184, 186, 188, 200, and 202.

- 2-9. (Canceled)

10. (Withdrawn – Currently Amended) The bioconjugate of Claim [[9]]1 wherein said peptide ~~comprises the binding portion of the integrin α_2 subunit (CD49b, VLA-2, platelet gpIa) I domain and binds specifically to ligands CN I, CN II, CN III, CN IV, LN or the echovirus-1 receptor.~~

11. (Withdrawn – Currently Amended) The bioconjugate of Claim [[9]]1 wherein said peptide ~~comprises a portion of the integrin α_4 (CD49b, VLA-4) subunit that binds specifically to the ligands VCAM-1, FN, MAdCAM-1, TSP or invasin.~~

12. (Withdrawn – Currently Amended) The bioconjugate of Claim [[9]]1 wherein said peptide comprises ~~a portion of the integrin α_5 (CD49e, VLA-5)~~ that binds specifically to ligands FN, L1 or invasins.

13. (Withdrawn – Currently Amended) The bioconjugate of Claim [[9]]1 wherein said peptide comprises ~~a portion of the integrin α_4 (CD11a) I domain~~ that binds specifically to the ligands ICAM-1, ICAM-2, ICAM-3 or LPS.

14. (Withdrawn – Currently Amended) The bioconjugate of Claim [[9]]1 wherein said peptide comprises ~~a portion of the integrin α_M subunit (CD11b) I domain~~ that binds specifically to the ligands iC3b, ICAM-1, ICAM-2, ICAM-4, Fb, Factor X, CD23, NIF, heparin, beta glucan, or LPS.

15. (Withdrawn – Currently Amended) The bioconjugate of Claim [[9]]1 wherein said peptide comprises ~~a portion of the integrin α_{IIb} (CD41) heavy chain~~ that binds specifically to the ligands Fb, FN, VN, TSP or vWF.

16. (Withdrawn – Currently Amended) The bioconjugate of Claim [[9]]1 wherein said peptide comprises ~~a portion of the integrin α_{IIb} (CD41) light chain~~ that binds specifically to the ligands Fb, FN, VN, TSP and vWF.

17. (Withdrawn – Currently Amended) The bioconjugate of Claim [[9]] wherein said peptide comprises a portion of the integrin β_1 (CD29) subunit, and binds specifically to the ligands FN, LN, CN, VCAM-1, FN, MAdCAM-1, TSP or invasins.

18. (Withdrawn – Currently Amended) The bioconjugate of Claim [[9]] wherein said peptide comprises a portion of the integrin β_2 (CD18) subunit that binds specifically to the ligands ICAM-1, ICAM-2, ICAM-3, ICAM-4, LPS, iC3b, Fb, Factor X, CD23, NIF, heparin, or betaglukan.

19. (Withdrawn – Currently Amended) The bioconjugate of Claim [[9]] wherein said peptide comprises a portion of the integrin β_3 (CD61) subunit that binds specifically to ligands fibrinogen, fibronectin, vitronectin, thrombospondin, von Willebrand factor, osteopontin, bone sialoprotein, laminins, collagens, or neural cell adhesion molecule L1.

20. (Withdrawn – Currently Amended) The bioconjugate of Claim [[9]] wherein said peptide comprises a portion of the integrin β_7 (LPAM-1) subunit that binds specifically to the ligands VCAM-1, fibronectin, MAdCAM-1, or E-cadherin (cadherin-1).

21-24. (Canceled)

25. (Withdrawn) The bioconjugate of Claim 1 wherein said polymer is a polysaccharide or an oligosaccharide.

26. (Withdrawn) The bioconjugate of Claim 1 wherein said polymer is a derivative of a polysaccharide or an oligosaccharide wherein said derivative polymer additionally comprises additional groups capable of reacting chemically with a peptide to form said bioconjugate.

27-30. (Canceled)

31. (Withdrawn) The bioconjugate of Claim 25 wherein said polysaccharide or oligosaccharide is selected from the group consisting of agarose, dextran, heparin, chondroitin sulfate, hydroxyethyl starch, and hyaluronic acid.

32. (Withdrawn – Currently Amended) The bioconjugate of Claim 1 wherein said polymer comprises a dextran ~~and said peptide comprises the binding portion of an integrin for its~~ ligand.

33. (Withdrawn) The bioconjugate of Claim 1 wherein said polymer is polyvalent and is selected from the group consisting of poly(ethylene glycol), poly(ethylene oxide), poly(vinyl alcohol), poly(acrylic acid), poly(ethylene-co-vinyl alcohol), poly(vinyl pyrrolidone), poly(ethyloxazoline), and poly(ethylene oxide)-co-poly(propylene oxide) block copolymers.

34. (Withdrawn) The bioconjugate of Claim 1 wherein said polymer comprises copolymers, block copolymers, graft copolymers, alternating copolymers, or random copolymers.

35. (Withdrawn) The bioconjugate of Claim 1 wherein said polymer is essentially inert.

36. (Withdrawn) The bioconjugate of Claim 1 wherein said polymer is degradable by hydrolytic or enzymatic means.

37. (Withdrawn) The bioconjugate of Claim 36 wherein said degradable polymer comprises one or more blocks selected from the group consisting of lactic acid, glycolic acid, ϵ -caprolactone, lactic-co-glycolic acid oligomers, trimethylene carbonate, anhydrides, and amino acids.

38. (Withdrawn) The bioconjugate of Claim 1 wherein said polymer is a serum protein.

39. (Withdrawn) The bioconjugate of Claim 38 wherein said serum protein is an albumin.

40. (Withdrawn) The bioconjugate of Claim 1 in a pharmaceutically acceptable carrier.

41. (Withdrawn) The bioconjugate of Claim 1 immobilized on a solid substrate.

42. (Withdrawn) The bioconjugate of Claim 41 wherein said substrate is an implantable medical device.

43. (Withdrawn) The bioconjugate of Claim 42 wherein said medical device is a drug delivery device.

44. (Withdrawn) The bioconjugate of Claim 41 wherein said substrate is a component of an in vitro diagnostic device.

45. (Withdrawn) The kit comprising one or more bioconjugates of Claim 1 and reagents and apparatus suitable for administering said bioconjugate to an individual.

46. (Withdrawn) The kit of Claim 45 wherein said bioconjugate is in a pharmaceutically acceptable carrier.

47-100. (Canceled)

101. (Withdrawn) Therapeutic replacement fluids comprising a bioconjugate of Claim 1 and a pharmaceutically acceptable diluent.

102. (New) A therapeutic bioconjugate comprising:

- (a) a hydrophilic polymer; and
- (b) a peptide comprising SEQ ID NO: 124.

103. (New) The therapeutic bioconjugate of claim 102, wherein the hydrophilic polymer is a polysaccharide.

104. (New) The therapeutic bioconjugate of claim 103, wherein the polysaccharide is dextran.

105. (New) A therapeutic bioconjugate comprising:

- (a) a polysaccharide; and
- (b) a peptide comprising SEQ ID NO: 124.